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ABSTRACT

Alcohol has been and continues to be the drug of choice of youth. More than 75% of adolescents have used alcohol by the age of 16 and over 60% of high school seniors nationwide have used some form of alcohol on the average of once a month. This study investigated factors affecting attitudes toward use of alcohol of 6th-grade students (N=68) and 8th-grade students (N=60). Students were from areas in central Kansas in which agriculture was the main source of income, and from a more urbanized area. The students were surveyed, and these variables were investigated: grade placement, gender, community, perceived peer attitude, perceived parental attitude, and knowledge of alcohol. The dependent variable was the individual's attitude toward use of alcohol score from the Alcohol Attitude Questionnaire. The results of the study appeared to support these generalizations: (1) perceived peer attitude was positively associated with the individual's attitude toward alcohol use; (2) perceived parental attitude was positively associated with the individual's attitude toward alcohol use; (3) gender and grade in school were not associated with the individual's attitude toward alcohol use; (4) no association was found between community and the individual's attitude toward alcohol use; and (5) knowledge about alcohol was not associated with the individual's attitude toward alcohol use. (Author/ABL)

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FACTORS ASSOCIATED WITH ATTITUDE TOWARD ALCOHOL USE OF SIXTH AND EIGHTH GRADE STUDENTS

being

A Thesis Presented to the Graduate Faculty
of the Fort Hays State University in
Partial fulfillment of the Requirements for
the Degree of Master of Science

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Abstract

The purpose of the researcher was to investigate factors affecting attitude toward use of alcohol of 6th and 8th grade students. There were 68 students in the sixth grade (41 males and 27 females) and 60 students in the eighth grade (31 males and 29 females) surveyed. The following independent variables were investigated: grade placement, gender, community, perceived peer attitude, perceived parental attitude, and knowledge of alcohol. The dependent variable was the individual's attitude toward use of alcohol score from the Alcohol Attitude Questionnaire. Five composite null hypotheses were tested at the .05 level of significance. A three-way analysis of variance was employed for all composite null hypotheses.

Twenty comparisons plus 15 recurring comparisons were made. Six of the comparisons were for main effect and 14 were for interactions. Of the six main effect two were statistically significant. The significant main effects were perceived parental attitude and perceived peer attitude. The results of the present study indicated the perceived attitudes toward use of alcohol of peers and parents were significant factors associated with attitudes of 6th and 8th grade students toward alcohol.

The results of the present study appeared to support the following generalizations:

1. Perceived peer attitude was positively associated with the individual's attitude toward alcohol use.

2. Perceived parental attitude was positively associated with the individual's attitude toward alcohol use.

3. Gender and grade in school were not associated with the individual's attitude toward alcohol use.

4. No association was found between community and the individual's attitude toward alcohol use.

5. Knowledge about alcohol was not associated with the individual's attitude toward alcohol use.

Introduction

Alcohol has been and continues to be the drug of choice of youth. More than 75% of adolescents have used alcohol by the age of 16 and over 60% of high school seniors nationwide used some form of alcohol on the average of once a month. Almost 10% of children in the United States had tried alcohol by the 6th grade (National Institute on Drug Abuse [NIDA] 1990).

Kandel and Logan (1984) presented a report based on a follow-up in 1980-1981 of a sample representative of adolescents formerly enrolled in the 10th and 11th grades in public secondary schools in Fall 1971. A total of 1,325 adults with a mean age of 24.7 were interviewed individually to reconstruct respondents drug and life histories. Alcohol had been used by almost every member in the sample. According to data collected, the period from age 13 to age 18 had the greatest increase in usage, with initial use of alcohol beginning around 12 years of age. The use of alcohol declined sharply after age 20.

A study was conducted by Freeman and Freeman (1977) to gain insight in to drug awareness, by grade level, of elementary children in rural North Carolina. A random

sample of 9 students each from the 1st through the 4th grade, 7 from the 5th grade and 10 from the 6th grade, were administered a word association test. Results indicated students became aware of alcohol as early as 1st and 2nd grade.

Veenker and Torabi (1984) developed a Likert-type instrument for measuring what they referred to as the three components of attitude; Feeling, Belief and Intention to Act. A total of 880 usable responses were obtained from a sample 18-29 years old and 55% male, with about 93% of the total sample indicating they were alcohol drinkers. The components all had a high reliability (α = .83 - .94) and exhibited a strong association between subscales and total score. The resultant measures for each component had a strong relationship with the use of beverage alcohol.

Scheier and Newcomb (1989) investigated alcohol use in early adolescence using a sample of 711 students in the 7th grade who participated in a longitudinal school-based prevention program. Assessments were made in regards to psychosocial, attitudinal, and behavioral correlates of alcohol use, merged with results from deviant activities as reported by school records. Multiple regression analysis was used to derive and extract risk factors as predictors for behaviors concerning alcohol and drug use. A majority

of the sample at baseline measurement and follow-up assessment reported using alcohol, although use declined during the two year time span as use of marijuana and other drugs increased. The results indicated peer/friendship relationships were related to higher risk factors both for initiation and experimentation with alcohol and drugs.

Ried, Martinson, and Weaver (1987) administered self-reporting instruments to a non-randomized sample of 5th through 8th grade students in a Midwest metropolitan area. The two most significant predictors of drug use were peer use and the respondents' own favorable drug use attitude. This study did not show a significant relationship with age, parental influence or school sentiment on use of alcohol.

Hubbard, Brownlee, and Anderson (1988) conducted a study of 7,562 students in grades 6, 7, and 8 who completed a drug and alcohol questionnaire. The results revealed a dramatic increase in the initiation of alcohol and drug use among youth through the middle school years. Only 4% of the 6th grade students reported having been drunk at least once, whereas 29% of the 8th grade students completing the survey had been drunk at least one time in their lives. Those who reported having friends who disapproved of drinking were less likely to use drugs or alcohol.

McDermott (1984) investigated the role of parental drug

use as it related to adolescent drug use. A sample of 106 drug-users and 96 nondrug-users was obtained through the use of the anthropological "snowball" technique. Chi-square analysis was used to determine the significance of the relationship between adolescent drug use and parents' use or nonuse of drugs and the child's perception of parents' attitude toward use. There was a positive relationship between parent use and offspring use. This limited study found perceived parental attitude of permissiveness or nonpermissiveness more strongly related to children's drug use.

Gibbons, Wylie, Echterling, and French (1986) administered a survey to 650 students in grades 7-12 in a city with a population of 5,000. Due to institutional constraints, 5-10% of the students in each grade level were used as a convenience sample. Multiple regression was used to analyze the data. Independent variables included age, sex, grade in school, parents' educational and occupational levels, family receipt of government assistance, frequency of attendance at religious services and time spent in social activities. The researchers reported 32% had their first drink of alcohol on their own by the age of 10. Gender was found to be a significant predictor of age at first drink, with more males beginning to drink and at an earlier age

than females.

Downs (1985) conducted a longitudinal study of a random sample of 114 (64 males) respondents who completed a baseline interview. Mean age at baseline for males was 15.8 years of age and for females it was 15.5 years. A year later 100 subjects (54 males) completed the follow-up interview. Three distinct sets of variables were used in this analysis: respondents' drinking behavior, respondents' attitudes toward alcohol, and drinking behavior of peers. Results indicated little affect on the drinking behavior of adolescent males by peer group influences. Females were affected more in age of drinking initiation by close friends than were males.

The findings of a study by Thompson (1989) indicated no statistically significant association with gender. Data were collected from 839 eleventh and twelth grade students who participated in a national survey as 7th and 8th graders. The researcher found drinking deteriorated peer relations and self-esteem.

Donovan and Jessor (1985) reported findings from research conducted with a national sample of 11th and 12th graders. This study surveyed 1,208 males and 1,444 females in regards to use of alcohol, cigarettes, marijuana and other drugs, as well as general deviant behavior, church

attendance, and school performance. Use of alcohol, cigarettes, marijuana and other drugs, and deviant behavior displayed a positive relationship with each other. Frequency of church attendance and school performance both related negatively to the other variables in this study. No significant difference was noted for gender in this survey.

A group of researchers (McLaughlin, Baer, Pokorny, Burnside, and Fairlie, 1984) studied adolescents with mean ages of 11.5 to 18 years old. Subjects were 2,598 seventh through eleventh grade health students from a predominately white, middle-class community. The subjects came from six different schools in two different districts. The students were administered a 200 question survey which included items related to demographics, substance use, attitudes, and peer relations. Use of alcohol occurred as early as 12.5 years of age with substantial increases evident at 6 month intervals until age 16. Females were behind their male counterparts in age of initiation, frequency of use, and volume of use.

Tortu (1988) reported the results of a study with a sample of 1465 students (53% male and 47% female) from 22 schools. Data examined were from a baseline questionnaire and an 18 month follow-up. Peer pressure was related to substance use without regard for gender. One finding

affecting only males was an inverse relationship between use of tobacco/alcohol and decision-making skills. Higher ratings in the areas of self-esteem, problem-solving confidence, and academic esteem were related to lower usage of alcohol by girls.

According to NIDA (1981) peer influence was one of, if not the most important variable that contributed to behavior problems. During late childhood and early adolescence, peers became a major factor in all the developmental steps. Youth were not influenced equally in all areas, but peer pressure was the dominant factor for many teenager's entrance into problem behaviors. It was also noted peer influence had more of an effect on increased use of alcohol if the parental relationship was deficient.

Grube and Morgan (1988) conducted a study on attitude-normative belief interactions in predicting adolescent substance use. Questionnaires were completed by 2,782 post-primary students concerning their beliefs, attitudes, and behaviors related to alcohol. Significant interactions were found regarding attitudes and normative beliefs about peer substance use. Researchers concluded some of the effect may have resulted from increased access to alcohol for students with peers who were using alcohol.

Greenberg, Zucker, and Noll (1985) studied 65 female

and 66 male preschool children aged 2.5 to 6 years. The subjects were given a picture identification test of beverage containers (five alcoholic and five non-alcoholic) and asked to pair them with 10 drawings of adults and children engaged in numerous activities. Participants were also requested to identify the type of beverage the container held. Knowledge about alcohol had a significant effect on children's perceptions of alcohol. In addition, children from families with a higher incidence of alcohol use had a higher cognitive awareness of alcohol.

Hays, Stacy, Widaman, DiMatteo, and Downey (1984) studied a national sample of 585 girls and 536 boys who were interviewed in the subject's homes. The interviews were structured to gain relevant data in three areas, (a) background: parental support-affection, parental approval of friends, and religiousness; (b) personality: self-esteem, conformity-commitment, and alienation, and (c) drug use: frequency of use of alcohol, marijuana, and other drugs. Conformity-commitment was found to have an important direct influence on alcohol use in all adolescent age groups. Religiousness was found to deter alcohol use among all age groups. Also reported was parental approval of friends had a direct impact on middle adolescents in regards to lower levels of alcohol use. The measures of self-esteem

and alienation were found to be inconsistently related to use.

Pisano and Rooney (1988) conducted a survey of fourth, 5th, and 6th grade students in an urban school district. The questionnaire was administered in health classes by physical education instructors. A total of 1,829 subjects responded. Four general categories were addressed by the instrument: substance use, peer influence, attitudes, and general and demographic information. Results indicated a significant change in attitude toward alcohol between 10.5 and 11.5 years of age. This shift in attitude corresponded with the shifting importance of parental guidance to peer companionship. There was no significant difference between the sexes in general attitude toward alcohol.

Miller, Smith, and Goldman (1990) investigated children's alcohol-related expectancies using elementary students from a suburban, midwestern public school of primarily middle-class background. Parents of selected children were contacted and asked to complete sociodemographic information forms. Of parents contacted 88% completed and returned forms, giving a sample of 89 subjects, 52 females and 37 males. Grade level related positively with expectations in the study. Parental drinking did not relate significantly to children's

alcohol-expectancies. The fathers' report of an alcoholic family member predicted children's combined expectancy score significantly ($r = .39$, $p < .005$).

Potvin and Lee (1980) investigated the influence parents, peers, and religion had on a nationwide sample of teenagers regarding alcohol use. Household interviews were held with 1,121 subjects of which 585 were females. Subjects were divided into three groups, 13-14, 15-16, and 17-18 year olds. Results indicated parents and religion had the greatest influence during early adolescence. Peer influence was found to have the strongest influence with 15 to 16 year olds. The oldest group demonstrated a greater integration of influences, with parents and peers exerting the most influence.

Kandel (1985) reviewed data from a longitudinal study conducted in 1971-1972 with high school students which examined peer influences in drug use. Subjects were 4,033 adolescent-parent dyads; 1,879 adolescent-best friend dyads; and 1,112 adolescent-best friend-parent triads. When adolescent's drinking was analyzed as a function of both parents and best friend, it was found 31% of subjects reported having drunk alcohol at least three times, compared with 39% for subjects whose parents were regular users. Percentages increased to 52% and 61% respectively when best

friend's use was also considered.

Moore, Moore, and Hauck (1982) used 96 students from the fourth and ninth grade in a small, rural public school located in Pennsylvania. Subjects were randomly assigned to experimental and control groups and the experimental group was given conditioning designed to inhibit the use of alcohol. The researchers found the attitudes of the 4th grade subjects to be more negative toward the use of alcohol than subjects from the 9th grade. Conditioning employed also resulted in subjects demonstrating a more negative attitude towards the use of alcohol than the control group. No significant relationship was found in regard to gender in this study.

Miller (1988) examined the effect of a program for positive self-esteem development and implications for adolescents. The subjects selected were 84 students from the 5th grade who were given a pretest followed by four months of classroom instruction focusing on self-esteem and attitude development concerning alcohol abuse. A post-test was used to determine changes in attitude. Pretest scores revealed that 58.3% of the subjects said they would not use alcohol even with parent approval. Peer use was even less of a factor as 84.5% indicated they would not use alcohol even if friends did. The post-test indicated stronger

commitments of positive attitudes toward refraining from alcohol use.

The findings of the study by Goodstadt, Sheppard, and Chan (1982) indicated there were different effects for different subgroups participating in an alcohol education program in public schools in Canada. A sample of 1,353 elementary students completed the alcohol education program, pretests and post-tests. Measures tested were knowledge about alcohol, attitudes about alcohol, and alcohol use. The researchers found among male drinkers that attitude toward alcohol became more pro-alcohol after the treatment.

Numerous studies concerning the factors influencing alcohol use have been reported by researchers. Veenker and Torabi (1984) and Kandel and Logan (1984) cited evidence that attitude towards alcohol predicted use of alcoholic beverages. Studies by Miller, Smith, and Goldman (1990), Potvin and Lee (1980), NIDA (1981), and McLaughlin et al. (1984) found age/grade of students to be positively associated with attitude toward alcohol. The influences of parents/peers were consistently high in association with development of permissive or nonpermissive attitudes toward alcohol in adolescence (Reid, Martinson, & Weaver, 1987; McDermott, 1984; Grube & Morgan, 1988; Hays et al., 1984). Gender was found to be inconsistently related to attitude

toward alcohol. Some researchers had found an association between gender and usage (McLaughlin et al., 1984; Tortu, 1988), while others found no statistically significant difference by sex (Donovan & Jessor, 1985; Moore, Moore, & Hauck, 1982; Pisano & Rooney, 1988). The present study was conducted to confirm and localize results for rural, western Kansas communities.

Statement of Problem

The purpose of the researcher was to investigate factors associated with attitude toward alcohol use of 6th and 8th grade students.

Importance of the Study

A review of the related literature indicated numerous studies had been conducted pertaining to factors associated with attitude toward alcohol. The present study was to obtain information confirming the association the variables of community, perceived peer attitude toward alcohol, perceived parental attitude toward alcohol, grade placement, gender, and knowledge of alcohol had in regard to the subjects' attitude toward alcohol.

The results of the present study could be useful to teachers, counselors, and organizations dealing with youth. The information from this study could be useful in several different ways. It could be used to understand adolescent

behaviors, to aid in planning curriculum or interventions and to provide a foundation for additional research.

The results from the present study provided information pertaining to the following questions:

1. Is there an association between community and attitude toward use of alcohol?
2. Is there an association between perceived peer attitude toward alcohol and attitude toward use of alcohol?
3. Is there an association between perceived parental attitude toward alcohol and attitude toward alcohol use?
4. Is there an association between grade placement and attitude toward alcohol use?
5. Is there an association between gender and attitude toward alcohol use?
6. Is there an association between knowledge of beverage alcohol and attitude toward alcohol use?

Composite Null Hypotheses

All null hypotheses were tested at the .05 level of significance.

1. The differences among the mean attitude toward alcohol scores for 6th and 8th grade students according to grade placement, gender, and perceived peer attitude will not be statistically significant.
2. The differences among the mean attitude toward alcohol scores for 6th and 8th grade students according to grade placement, gender, and perceived parental attitude will not be statistically significant.
3. The differences among the mean attitude toward alcohol scores for 6th and 8th grade students according to grade placement, perceived parental attitude, and perceived peer attitude will not be statistically significant.
4. The differences among the mean attitude toward alcohol scores for 6th and 8th grade students according to gender, perceived parental attitude, and perceived peer attitude will not be statistically significant.
5. The differences among the mean attitude toward

alcohol scores for 6th and 8th grade students according to community, gender, and knowledge of alcohol will not be statistically significant.

Definition of Variables

Independent Variables

Information regarding independent variables number one and two was obtained by self-reporting instruments.

1. Grade placement--two levels, 1. 6th grade and 2. 8th grade.
2. Gender--two levels, 1. female and 2. male.
3. Perceived peer attitude--two levels determined post hoc.
4. Perceived parental attitude--two levels determined post hoc.
5. Community--three levels 1. Paradise, 2. Great Bend, and 3. Tipton.
6. Knowledge of alcohol--three levels determined post hoc.

Dependent Variable

The dependent variable in the present study was attitude toward alcohol as determined by section one on the Alcohol Attitude Questionnaire (see Appendix A). Possible scores on this section ranged from a minimum of 8 to a maximum of 40.

Limitations

The following might have affected the results of the present study:

1) subjects were not selected randomly, and
2) respondents were limited to western Kansas.

Delimitations

The following steps were not implemented in the present study:

1) no pilot study was made of the Alcohol Attitude Questionnaire (AAQ),
2) no reliability studies were made for the AAQ, and
3) no validity studies were made for the AAQ.

Methodology

Setting

The researcher selected three communities in central Kansas to use in the survey. Two of the communities, Paradise and Tipton, had small schools with less than 60 students 5th through 8th grades. The Paradise school served three small towns (populations of 515, 70, and 65) with one attendance center for 5th through 8th grades. Tipton was part of a larger district, with several attendance centers, although there was an attendance center for 5th through 8th grades that served the town and surrounding area. In both

small towns the major source of income was agriculture. The third and largest of the three communities studied was Great Bend with a population of 16,800. The 6th grade students attended a center that consisted of over 250 students, kindergarten through 6th grade. The 8th graders attended a middle school with an enrollment of 480. This community was more urbanized with oil production and goods and services the leading income producers.

Subjects

The 6th grade classes had a total of 68 students, 41 males and 27 females. There were 60 8th graders who participated, 31 males and 29 females. All students present in selected classes completed the Alcohol Attitude Questionnaire.

Instrument

In order to assess attitudes, knowledge, and perceptions related to alcohol of 6th and 8th grade students, the researcher developed the Alcohol Attitude Questionnaire (AAQ). Kim, Hoffman, Pike and Gibson (1984) developed an instrument for evaluating school-based programs on alcohol education which provided some ideas and framework to follow. Also Pennington and Passey (1964) and Passey and Pennington (1964) contributed research on assessing attitude toward alcohol. After reviewing the related literature, a

pool of possible questions was developed. A process of rational elimination was then used to streamline the instrument for the population the researcher was surveying. The final list of questions and categories were selected for clarity, intent, and grade level and changes were made for ease of testing and scoring.

The final questionnaire (see Appendix A) was comprised of five parts;

1. section 1--demographics (age, gender, and classification),
2. section 2--10 questions on respondent's attitudes toward alcohol with Likert-type rating,
3. section 3--7 dichotomized questions on perceived parental attitude toward alcohol,
4. section 4--7 dichotomized questions on perceived peer attitude toward alcohol, and
5. section 5--10 questions for content knowledge of alcohol.

Scoring for section 2 was preformed by adding points for each question which resulted in a total score with a minimum possible of 8 and a maximum possible of 40. Each positive alcohol attitude question (questions 2, 3, 6, 9, and 10) was scored as follows: strongly disagree = 1, disagree = 2, agree = 3, strongly agree = 4, with the

inverse scoring for negative attitude toward alcohol questions (questions 1,4,5,7, and 8). Section 3 was scored as follows; "YES" = 1 and "NO" = 0 on questions 1, 2, 3, 5, 6, 8, and 9, and "YES" = 0 and "NO" = 1 on questions 4 and 7. Section 4 was scored as follows; "YES" = 1 and "NO" = 0 on questions 1, 2, 3, 5, 7, 8, and 9,and "YES" = 0 and "NO" = 1 on questions 4 and 6. Section 5 was scored by giving 1 point for each correct answer for a minimum possible score of 0 and a maximum possible score of 10.

Design

A status survey factorial design with predetermined categories and post hoc groupings was employed. The following designs were used:

composite null hypotheses numbers one through four: 2 X 2 X 2 factorial design and,

composite null hypothesis number five: a 3 X 2 X 3 factorial design.

McMillan and Schumacher (1984) and Campbell and Stanley (1963) identified potential threats to internal validity. Ten threats to internal validity and how the researcher dealt with them in the present study follow:

1. history--not applicable, only one measurement taken;
2. selection--all subjects present completed

the instrument;

3. statistical regression--not applicable, samples selected were not extreme;
4. testing--not applicable, only one measurement taken;
5. instrumentation--not applicable, only one measurement taken;
6. mortality--the present study included all usable questionnaires;
7. maturation--not applicable, only one measurement taken;
8. diffusion--not applicable, no treatment employed;
9. experimenter bias--data collection was uniform, the same instructions were read to all subjects, there was no treatment; and
10. statistical conclusions--two mathematical assumptions of the analysis of variance were violated, random sampling and cells did not have an equal number of subjects (the general linear model was used to adjust for the lack of equal number of subjects in cells), and interpretations were not projected beyond the statistical procedures employed.

Two threats to external validity as discussed by

Campbell and Stanley (1963) and McMillan and Schumacher (1984) were dealt with in the following manner:

1. population external validity--convenience sampling was employed, so generalizations should be confined to similar settings, and
2. ecological external validity--no treatment was employed in the present study and data were collected using accepted techniques.

Data Collecting Procedures

Principals of selected schools were contacted, informed of the nature of the research and its purpose, and permission requested. After receiving approval a time and date was set for data collection in each school. In each school the researcher inventoried subjects by classroom. All students were assured of anonymity and confidentiality of individual responses. Specific instructions in regards to completing the instrument were then read by the researcher and time was given to answer questions concerning marking the instrument. The researcher collected, examined and coded all questionnaires. The computing center at Fort Hays State University was utilized to analyze the data.

Research Procedures

In conducting the present study the researcher employed the following global operations:

1. selection of topic,
2. precursory review of related literature,
3. topic narrowed and defined,
4. comprehensive review of related literature,
5. instrument developed,
6. research proposal compiled,
7. research proposal defended,
8. data collected,
9. data analyzed,
10. research report written,
11. research report defended, and
12. final editing of the document.

Data Analyses

The following were compiled:

1. appropriate descriptive statistics,
2. three-way analysis of variance (general linear model),
3. Bonferroni (Dunn) *t*-test for means, and
4. Duncan's multiple range test for means.

Results

The purpose of the researcher was to investigate factors affecting attitude toward use of alcohol of 6th and 8th grade students. The following independent variables were investigated: grade placement, gender, community, perceived peer attitude, perceived parental attitude, and knowledge of alcohol. The dependent variable investigated was the individuals attitude toward use of alcohol. Five composite null hypotheses were tested at the .05 level of significance. A three-way analysis of variance was employed for all null hypotheses. The results section was organized according to composite null hypotheses for ease of reference. Information pertinent to each composite null hypothesis was presented in a common format for ease of comparison.

It was hypothesized in composite null hypothesis number one that the differences among the mean attitude toward

alcohol scores according to grade placement, gender, and perceived peer attitude toward alcohol use would not be statistically significant. Information pertaining to composite null hypothesis number one was presented in Table 1. The following information was cited in Table 1: variables, sample sizes, means, standard deviations, *F* values, and *p* levels.

Table 1

A Comparison of Mean Attitude Toward Alcohol Scores for 6th and 8th Grade Students According to Grade Placement, Gender, and Perceived Peer Attitude Employing a Three-Way Analysis of Variance

Variable	n	M*	S	F Value	p Level
Grade Placement (A)					
6th	68	18.9	5.40	0.20	.6518
8th	60	20.4	4.52		
Gender (B)					
Male	72	20.2	5.08	1.77	.1858
Female	56	18.8	4.92		
Perceived Peer Attitude (C)					
Positive Toward Alcohol	54	21.9[a]	4.88	17.94	.0001
Negative Toward Alcohol	74	17.9[b]	4.52		
		Interactions			
		A x B		0.70	.4061
		A x C		3.39	.0681
		B x C		0.50	.4797
		A x B x C		0.37	.5448

* The larger the value the more positive the attitude toward alcohol use.

[ab] Difference statistically significant at the .05 level according to Bonferroni(Dunn) t-test for means.

One of the seven p values was statistically significant at the .05 level; therefore, the null hypothesis for this comparison was rejected. The statistically significant comparison was for the main effect of perceived peer attitude. Information cited in Table 1 indicated individuals who reported their peers were more positive toward use of alcohol had a more positive attitude of alcohol themselves.

It was hypothesized in composite null hypothesis number two that the differences among the mean attitude toward alcohol scores according to grade placement, gender, and perceived parental attitude toward alcohol use would not be statistically significant. Information pertaining to composite null hypothesis number two was presented in Table 2. The following information was cited in Table 2: variables, sample sizes, means, standard deviations, F values, and p levels.

Table 2

A Comparison of Mean Attitude Toward Alcohol Scores for 6th and 8th Grade Students According to Grade Placement, Gender, and Perceived Parental Attitude Employing a Three-Way Analysis of Variance

Variable	n	M*	S	F Value	p Level
Grade Placement (A)					
6th	68	18.9	5.40	0.50	.4823
8th	60	20.4	4.52		
Gender (B)					
Male	72	20.2	5.08	1.36	.2464
Female	56	18.8	4.92		
Perceived Parental Attitude (D)					
Positive Toward Alcohol	51	21.5[a]	4.20	11.64	.0009
Negative Toward Alcohol	75	18.4[b]	5.20		
		Interactions			
		A x B		2.01	.1590
		A x D		2.12	.1477
		B x D		0.23	.6297
		A x B x D		0.00	.9980

* The larger the value the more positive the attitude toward alcohol use.

[ab] Difference statistically significant at the .05 level according to the Bonferroni(Dunn) t-test for means.

One of the seven p values was statistically significant at the .05 level; therefore, the null hypothesis for this comparison was rejected. The statistically significant comparison was for the main effect of perceived parental attitude. Information cited in Table 2 indicated individuals who reported their parents were more positive toward use of alcohol had a more positive attitude of alcohol themselves.

It was hypothesized in composite null hypothesis number three that the differences among the mean attitude toward alcohol scores according to grade placement, perceived parental attitude, and perceived peer attitude toward alcohol use would not be statistically significant. Information pertaining to composite null hypothesis number three was presented in Table 3. The following information was cited in Table 3: variables, sample sizes, means, standard deviations, F values, and p levels.

Table 3

A Comparison of Mean Attitude Toward Alcohol Scores for 6th and 8th Grade Students According to Grade Placement, Perceived Parental Attitude, and Perceived Peer Attitude Employing a Three-Way Analysis of Variance

Variable	n	M*	S	F Value	p Level
Grade Placement (A)					
6th	68	18.9	5.40	3.23	.0746
8th	60	20.4	4.52		
Perceived Peer Attitude (C)					
Positive Toward Alcohol	54	21.9[a]	4.88	19.74	.0001
Negative Toward Alcohol	74	17.9[b]	4.52		
Perceived Parental Attitude (D)					
Positive Toward Alcohol	51	21.5[a]	4.20	4.91	.0286
Negative Toward Alcohol	75	18.4[b]	5.20		
		Interactions			
		A x C		1.18	.2792
		A x D		2.38	.1259
		C x D		0.00	.9590
		A x C x D		0.29	.5938

* The larger the value the more positive the attitude toward alcohol use.

[ab] Difference statistically significant at the .05 level according to Bonferroni(Dunn) t-test for means.

Two of the seven p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were rejected. The statistically significant comparisons were for the main effect of perceived parental attitude and perceived peer attitude, which were recurring comparisons (see Tables 1 and 2). The results cited in Table 3 indicated no additional association between independent and dependent variables.

It was hypothesized in composite null hypothesis number four that differences among the mean attitude toward alcohol scores according to gender, perceived parental attitude, and perceived peer attitude toward alcohol use would not be statistically significant. Information pertaining to composite null hypothesis number four was presented in Table 4. The following information was cited in Table 4: variables, sample sizes, means, standard deviations, F values, and p levels.

Table 4

A Comparison of Mean Attitude Toward Alcohol Scores for 6th and 8th Grade Students According to Gender, Perceived Parental Attitude, and Perceived Peer Attitude Employing a Three-Way Analysis of Variance

Variable	n	M*	S	F Value	p Level
Gender (B)					
Male	72	20.2	5.08	1.27	.2611
Female	56	18.8	4.92		
Perceived Peer Attitude (C)					
Positive Toward Alcohol	54	21.9[a]	4.88	12.07	.0007
Negative Toward Alcohol	74	17.9[b]	4.52		
Perceived Parental Attitude (D)					
Positive Toward Alcohol	51	21.5[a]	4.20	4.69	.0322
Negative Toward Alcohol	75	18.4[b]	5.20		
		Interactions			
		B x D		0.01	.9275
		B x C		0.03	.8592
		C x D		0.07	.7877
		B x C x D		0.01	.9135

* The larger the value the more positive the attitude toward alcohol use.

[ab] Difference statistically significant at the .05 level according to the Bonferroni(Dunn) t-test for means.

Two of the seven p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were rejected. The statistically significant comparisons were for the main effect of perceived parental attitude and perceived peer attitude, which were recurring comparisons (see Tables 1 and 2). The results cited in Table 4 indicated no additional association between independent and dependent variables.

It was hypothesized in composite null hypothesis number five that the differences among the mean attitude toward alcohol scores according to community, gender, and knowledge of alcohol would not be statistically significant. Information pertaining to composite null hypothesis number five was presented in Table 5. The following information was cited in Table 5: variables, sample sizes, means, standard deviations, F values, and p levels.

Table 5

A Comparison of Mean Attitude Toward Alcohol Scores for 6th and 8th Grade Students According to Community, Gender, and Knowledge of Alcohol Employing a Three-Way Analysis of Variance

Variable	n	M*	S	F Value	p Level
Gender (B)					
Male	72	20.2	5.08	0.04	.8465
Female	56	18.8	4.92		
Community (E)					
Paradise	30	18.6	4.48		
Tipton	22	20.7	3.91	2.96	.0562
Great Bend	76	19.6	5.51		
Knowledge of Alcohol (F)					
High (9-10)#	41	19.2	5.10		
Moderate (8)#	33	19.4	5.49	1.34	.2665
Low (≤7)#	56	20.0	4.81		
		Interactions			
		B x E		1.88	.1575
		B x F		1.62	.1735
		E x F		0.39	.6764
		B x E x F		2.31	.0621

* The larger the value the more positive the attitude toward alcohol use.

Number correct on the Knowledge of Alcohol Questionnaire. 0 to 10 Possible.

None of the seven p values were statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 5 indicated no additional associations between the independent and dependent variables.

Discussion

The purpose of the researcher was to investigate factors affecting attitude toward use of alcohol of 6th and 8th grade students. There were 68 students in the 6th grade (41 males and 27 females) and 60 students in the 8th grade (31 males and 29 females) surveyed. The following independent variables were investigated: grade placement, gender, community, perceived peer attitude, perceived parental attitude, and knowledge of alcohol. The dependent variable was the individuals attitude toward use of alcohol score from the AAQ. Five composite null hypotheses were tested at the .05 level of significance. A three-way analysis of variance was employed for all composite null hypotheses.

Twenty comparisons plus 15 recurring comparisons were made. Six of the comparisons were for main effect and 14 were for interactions. Of the six main effect two were statistically significant. The significant main effects were perceived parental attitude and perceived peer

attitude. The results of the present study indicated the perceived attitudes toward use of alcohol of peers and parents were significant factors associated with attitudes of 6th and 8th grade students toward alcohol.

The results of the present study did not appear to support McLaughlin et al.(1984) and Tortu (1988) who found an association between gender and use of alcohol. The present study supported the findings of Donovan & Jessor (1985), Moore, More, & Hauck (1982), and Pisano & Rooney (1988), who found no statistically significant relationship between gender and attitude toward alcohol.

Reid, Martinson, and Weaver (1987), and NIDA (1981) found significant association between peer attitudes and the individual's attitude toward use of alcohol. This finding was substantiated by the results of the present study.

The present study supported McDermott (1984), who reported perceived parental attitude of permissiveness or nonpermissiveness strongly related to children's drug use. The researcher found a significant association between perceived parental attitude and the respondent's attitude.

Hubbard, Brownlee, and Anderson (1988) found age/grade to be positively associated with alcohol use. Greenberg, Zucker, and Noll (1985) and Goodstadt, Sheppard, and Chan (1982) reported a significant interaction between knowledge

of alcohol and attitude toward alcohol use. Neither findings were substantiated by the results of the present study.

In the opinion of the researcher the discrepancies between the present and related studies were due to a small non-random sample from rural settings. The researcher also believes the present study indicated agreement with related studies in spite of the limitations.

The results of the present study appeared to support the following generalizations:

1. Perceived peer attitude was positively associated with the individual's attitude toward alcohol use.
2. Perceived parental attitude was positively associated with the individual's attitude toward alcohol use.
3. Gender and grade in school were not associated with the individual's attitude toward alcohol use.
4. No association was found between community and the the individual's attitude toward alcohol use.
5. Knowledge about alcohol was not associated with the individual's attitude toward alcohol use.

The results of the present study appeared to support the following recommendations:

1. The study should be replicated with a random

sample.

2. The study should be replicated employing a random sample from schools with greater economic, race, and cultural variations.

3. The study should be replicated studying both older and younger students.

The results of the present study appeared to provide the basis for the following implications for schools:

1. Intervention to effect change in peer relations and attitudes.

2. Intervention to effect change in information and and relations with parents.

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Appendix A

Alcohol Attitude Questionnaire

ALCOHOL ATTITUDE QUESTIONNAIRE

Section 1.

SEX: ☐ male ☐ female

AGE: _____ CLASS: _____

Section 2. Individual Attitude

1. Drinking is not healthy.
   ☐ strongly disagree ☐ disagree ☐ agree ☐ strongly agree

2. Parties and alcohol go together.
   ☐ strongly disagree ☐ disagree ☐ agree ☐ strongly agree

3. It is O. K. to get drunk.
   ☐ strongly disagree ☐ disagree ☐ agree ☐ strongly agree

4. It is wrong for minors to drink .
   ☐ strongly disagree ☐ disagree ☐ agree ☐ strongly agree

5. I hate being around people drinking.
   ☐ strongly disagree ☐ disagree ☐ agree ☐ strongly agree

6. I like to be around people who drink.
   ☐ strongly disagree ☐ disagree ☐ agree ☐ strongly agree

7. Drinking is O. K. if you don't get drunk.
   ☐ strongly disagree ☐ disagree ☐ agree ☐ strongly agree

8. Drinking is for fools.
   ☐ strongly disagree ☐ disagree ☐ agree ☐ strongly agree

9. Drinking makes people feel good.
   ☐ strongly disagree ☐ disagree ☐ agree ☐ strongly agree

10. I would like getting high on alcohol.
    ☐ strongly disagree ☐ disagree ☐ agree ☐ strongly agree

Section 3. Parental Attitude

1. My parents have friends who drink a lot.

☐ YES ☐ NO

2. My parents think it is all right to drink at parties.

☐ YES ☐ NO

3. One or both of my parents drink.

☐ YES ☐ NO

4. If I had a drink my parents would be upset.

☐ YES ☐ NO

5. My parents usually keep some type of alcohol in our house.

☐ YES ☐ NO

6. My parents think it is OK to drink.

☐ YES ☐ NO

7. If I got drunk my parents would be upset.

☐ YES ☐ NO

8. My parents will allow me to drink when I am in high school.

☐ YES ☐ NO

9. My parents have given me a drink.

☐ YES ☐ NO

Section 4. Peer Attitude

1. Do your close friends think it is "cool" to drink?

☐ YES ☐ NO

2. Do you have close friends who drink?

☐ YES ☐ NO

3. Has any good friend ever gotten drunk?

☐ YES ☐ NO

4. Would your best friend be mad at you if you drank?

☐ YES ☐ NO

5. If a good friend offered a drink, would you take it?

☐ YES ☐ NO

6. Would your best friend be mad at you if you got drunk?

☐ YES ☐ NO

7. If you had a party would you allow a friend to bring alcohol?

☐ YES ☐ NO

8. My friends drink once in a while.

☐ YES ☐ NO

9. My friends will probably drink when they get in high school.

☐ YES ☐ NO

Section 5. Knowledge of Alcohol

1. Do alcoholics dress and look different than most people?

☐ YES ☐ NO

2. Is alcohol considered a drug?

☐ YES ☐ NO

3. To legally drink alcohol in Kansas you must be at least ___ years old.

☐ 16 ☐ 18 ☐ 21

4. Is alcoholism considered a disease?

☐ YES ☐ NO

5. A small amount of alcohol actually improves your reactions and thinking by relaxing you.

☐ YES ☐ NO

6. Alcoholics are people who are drunk most of the time.

☐ YES ☐ NO

7. A shot glass is a large mug that beer is served in.

☐ YES ☐ NO

8. Which contains the most alcohol; an ounce of beer, an ounce of wine, or an ounce of whiskey.

☐ beer ☐ wine ☐ whiskey

9. It would be easy for an alcoholic to stop drinking if they really wanted to.

☐ YES ☐ NO

10. Alcohol is less harmful than other drugs, such as marijuana.

☐ YES ☐ NO

Appendix B

Alcohol Attitude Questionnaire Instructions

INSTRUCTIONS

The survey you are about to take is intended to collect information regarding attitudes toward alcohol use by youth. All individual information will be kept confidential. Do not mark on the paper until you are told to begin. Do not put your name on the questionnaire. (Hand out forms now.)

Please complete section 1 now, by placing a checkmark or an X in the appropriate box, male or female. Also write your current age in the space provided and grade in school on the line marked "Class". (Allow time to complete this part.)

Section 2 has a rating scale. For example if the statement was "Reeboks are the best sneaker." If you think they are the greatest you would mark "strongly agree". If you believe they are lousy mark "strongly disagree". If you like them but think they may not be the best mark "agree", and if you don't like them, but don't think they are the worst mark "disagree". **Please mark only one box on each statement, but be sure to mark one.** For this survey, **drink or drinking** refers to consuming any type of alcoholic beverage, such as beer, wine, whiskey or other.

On sections 3, 4, and 5 mark the answer you feel is best or that you agree with. **Mark only one box for each question, but be sure to mark one.**

Please complete **all sections** and **all questions.**

When you are done please turn the papers over and wait quietly until all are finished. If you have a question about something, please raise your hand and I will come to you.

Are there any questions now? You may begin.

Pick up all papers and place in envelope.

Appendix C

AAQ Reliability Coefficients

Concurrent Reliability Coefficients (Cronbach Alpha)
for Alcohol Attitude Questionnaire

Part 2. Individual Attitude

Cronbach Alpha = .80

Part 3. Parental Attitude

Cronbach Alpha = .72

Part 4. Peer Attitude

Cronbach Alpha = .83

Part 5. Knowledge of Alcohol

Cronbach Alpha = .49

Appendix D

AAQ Validity

Individual Attitude Questionnaire

Item Correlation with Total Score

Items	Correlation with Total Score
1	.42
2	.56
3	.65
4	.57
5	.74
6	.60
7	.59
8	.64
9	.49
10	.64

Parental Attitude Questionnaire

Item Correlation with Total Score

Items	Correlation with Total Score
1	.58
2	.71
3	.53
4	.61
5	.57
6	.52
7	.44
8	.49
9	.59

Peer Attitude Questionnaire

Item Correlation with Total Score

Items	Correlation with Total Score
1	.61
2	.59
3	.70
4	.60
5	.63
6	.68
7	.56
8	.75
9	.62

Individual Attitude Questionnaire

Item Correlation with Total Score

Items	Correlation with Total Score
1	.54
2	.42
3	.41
4	.66
5	.32
6	.36
7	.32
8	.36
9	.44
10	.36

Appendix E

Letters to Schools

April 24, 1991

Mr. Larry Toney, Principal
Tipton Elementary School
Tipton, Kansas

Dear Mr. Toney,

This is to confirm our conversation regarding surveying classes in your school. I will be at your building on April 26 at 11:00 AM to administer the Alcohol Attitude Survey I described to you in our phone conversation on the 24th of April.

Thank you, your students, and your faculty for your consideration and allowing me the opportunity to collect data in your school.

Sincerely,

Glen Strecker

Ph. (913)998-4440

April 24, 1991

Mr. Keith Higgins, Principal
USD #399
Paradise, Kansas 67658

Mr. Higgins,

This is to confirm our conversation regarding surveying classes in your school. I will be at your facility April 29, at 8:30 AM to administer the Alcohol Attitude Survey to the classes we discussed.

Thank you, your faculty, and your students for your consideration and allowing me the opportunity to collect data in your school.

Sincerely,

Glen Strecker

Ph. (913)998-4440

April 25, 1991

Mr. Jim Lentz
USD 428 Education Center
201 South Patton Rd.

Great Bend, Kansas 67530

Mr. Lentz,

Enclosed you will find a copy of the Alcohol Attitude Questionnaire we discussed in your office April 24th. This is the copy you requested to keep in your files. If you have any other questions or if there is anything further you may need please contact me.

Thank you for your time and consideration and allowing me the opportunity to collect data for my thesis in your system. The courtesy and cooperation shown me by you and the other administrators was appreciated.

Sincerely,

Glen Strecker

(913) 998-4440